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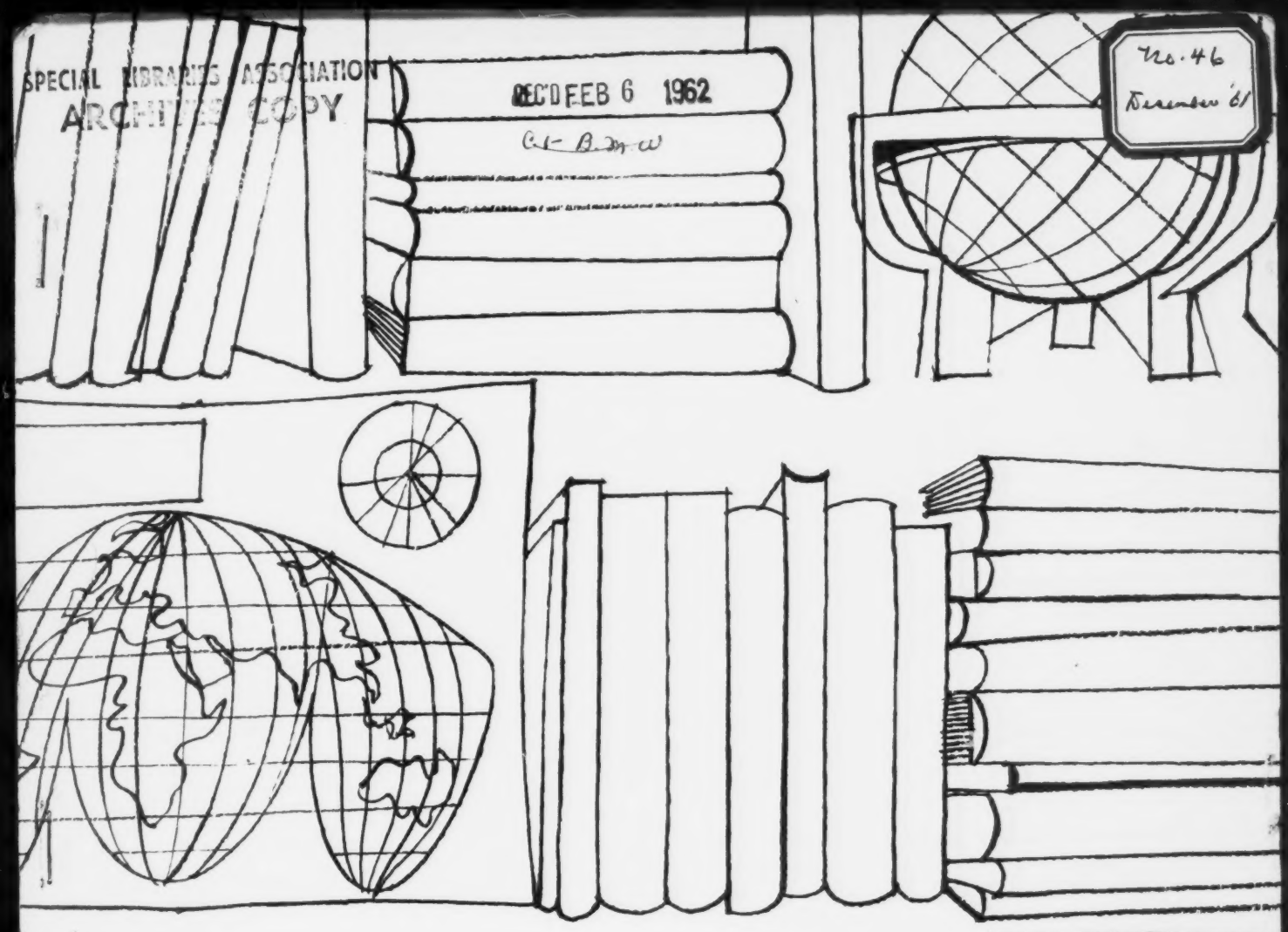
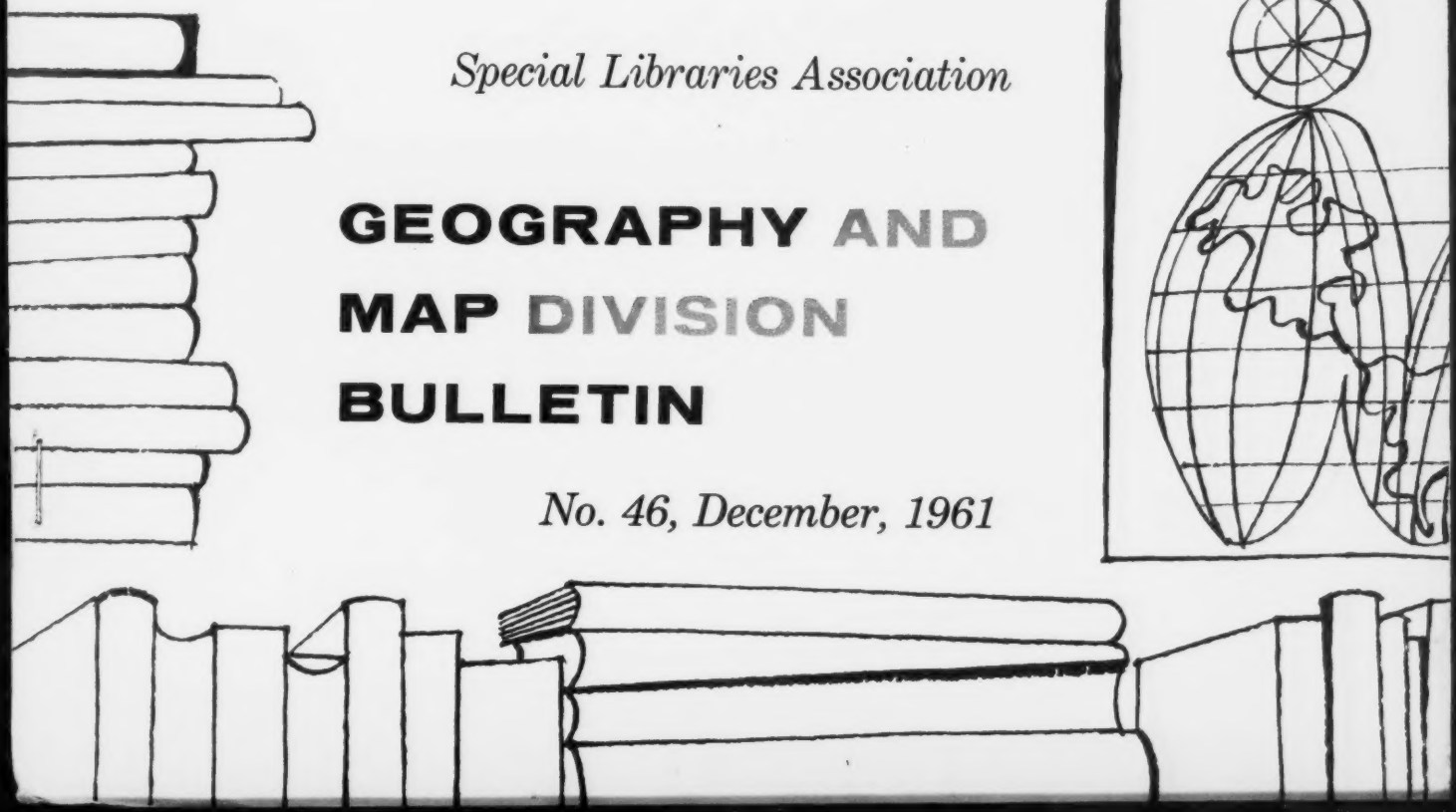


Special Libraries Association

GEOGRAPHY AND MAP DIVISION BULLETIN

No. 46, December, 1961



GEOGRAPHY AND MAP DIVISION

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Designed for those concerned with cartographical and geographical materials, the Bulletin, in addition to providing important new book and map lists, also serves as a forum for the exchange of recent news, ideas and techniques in the handling of these materials. Original articles are carried on research problems, mapping programs, classification systems, historical studies, subject bibliographies, descriptions of collections, etc. Current issues are known to be indexed in Library Literature, Current Geographical Publications, Surveying and Mapping, and Bibliotheca Cartographica.

BULLETIN no. 46 December, 1961

GEOGRAPHY AND MAP DIVISION

SPECIAL LIBRARIES ASSOCIATION

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For information regarding membership in the Special Libraries Association, write to Bill M. Woods, Executive Secretary, Special Libraries Association, 31 East 10th Street, New York 3, New York.

MEETINGS: JANUARY 1962 TO SEPTEMBER 1962

Jan. 22 - Jan. 26, 1962	American Meteorological Society. Annual Meeting. New York, N. Y.
Feb. 7 - Feb. 9, 1962	Canadian Institute of Surveying & Photogrammetry. Annual Meeting. Ottawa, Ontario.
March 11-17, 1962	American Congress on Surveying and Mapping and American Society of Photogrammetry. Consecutive meeting and co-exhibits. Washington, D. C.
March 26 - April 20, 1962	World Meteorological Organization. Commission for Synoptic Meteorology. Washington, D. C.
April 22-25, 1962	Association of American Geographers. 58th Annual Meeting. Miami Beach, Florida.
April 23-25, 1962	International Union of Geodesy & Geophysics with World Meteorological Organization. Symposium on Rocket and Satellite Meteorology. Washington, D. C.
April 25-28, 1962	American Meteorological Society. 202nd National Meeting. Washington, D. C.
May 1962	International Association of Geodesy. Symposium on Use of Artificial Satellites for Geodetic Purposes. Washington, D. C.
May 8-?, 1962	7th International Hydrographic Conference. Monte Carlo, Monaco.
May 27-31, 1962	Special Libraries Association. 53rd Annual Convention. Washington, D. C.
June 1962	International Association of Geodesy. Symposium on Space Geodesy. Trieste, Italy.
June 26-28, 1962	American Meteorological Society. General Meeting. Fairbanks, Alaska.
July 9-27, 1962	World Meteorological Organization. Commission for Agricultural Meteorology. Toronto, Canada.
Sept. 10-14, 1962	American Meteorological Society. 4th Conference on Applied Meteorology. Hampton, Virginia.

MAP LIBRARIES - SPACE AND EQUIPMENT

The Geography and Map Division is sharing in the Special Libraries Association program to prepare a set of professional standards for space and equipment. As a result of the work of the Division's Committee on Standards, we are submitting this report on space and equipment for Geography and Map Libraries. The work of the Committee in general was based on a preliminary study of the literature on both map and other library standards, current research and development on documentation and on plans for libraries such as the Army Map Service, the National Archives, the American Geographical Society, Dartmouth College's Baker Library, the Library of Congress, Rand McNally & Co., General Drafting Company, the University of Illinois' Map Library and their Geological Library, the District of Columbia's Public Library and many others. In addition, the Committee studied various equipment and supply catalogs, consulted competent authorities and visited other libraries prior to preparing a preliminary report.

First and foremost, we agreed that the librarian should be consulted when a new library is planned or when a change is made in the location of the Map and Geography Library. If the librarian is not a specialist in geography, cartography or maps, such a specialist (preferably one familiar with library operations) should be consulted.

Planning a new or renovating an old map library should start with a program statement covering objectives, activities and requirements. This provides a basis for using general standards or evolving specific ones to fit the special circumstances of the library concerned. There are differences in the types of reference books and maps used in college, university, public, private (industry) and government agency libraries and in the amounts and kinds of services rendered.

The map library need not be restricted to library activities if the policy of the supporting agency permits such activities as group instruction, tours or visits. Arrangements for these should be made in advance. Some libraries which handle security classified materials could not permit the entrance of unauthorized personnel or a non-library use of the area. The multi-purpose room facilities in some larger libraries might be utilized for map or geography lectures, meetings or conferences, generally to be held after regular working hours. A detailed plan involving these and related factors will help to insure the full and efficient use of available space.

The physical facilities of the library are a symbol of service within the environment and should represent functional efficiency and beauty. Consultation with an architect is a necessity to achieve this. Parking space for the staff and public is rapidly becoming an item of primary importance.

A map library, which should be an integral department within the parent organization, should be as close as possible to supporting operations, both to facilitate maximum use by readers and to expedite work of the library staff. There should be ample space and equipment to arrange materials properly and to provide for the comfort of employees. The physical facilities of the map library should, for maximum economy and effectiveness, conform wherever possible to equipment throughout the general library or organization. Sections frequently

used by readers, such as the reading areas, bookcases, lending desk, catalogs, information resources, etc., should be located in logical functional relationship to each other and to locations for receiving, cataloging and physical processing of materials. One large room may be preferable to several small rooms. When desired, divisions may be made by arrangement of file cases, book shelves or other equipment.

Map rooms should be located on the first or ground floor and adjacent to the map files. This location is essential because the weight, and resultant stress load of the map cases, requires special strengthening of building supports if map cases are placed on an upper floor. (See Fig. 1). The reading room should be part of or adjacent to the map files for ease in transporting the wanted maps and atlases to readers. Because of the bulk of special materials such as maps, atlases, plastic models and globes, it is highly desirable to provide a separate reading room. For the small or average size map library one large area is preferred. It may be subdivided for reference use, for storage, for working and for administrative purposes, by furniture or equipment.

Careful planning of the arrangement of equipment should be a prerequisite to the actual assignment of space. To arrive at the minimum floor space needed for storage, double the square footage occupied by equipment. This does not include expansion space. For reading and working areas, triple the square footage occupied by equipment and furniture.

The following diagram (Fig. 2) represents possible use of floor space and equipment for a map library with a collection of approximately 100,000 maps together with requisite reference and working materials. The second diagram (Fig. 3) shows an adequate installation for a collection of 10,000 maps.

Three large, five-drawer sections will hold a maximum of 3,000 maps and provide work space on the top to handle maps for processing or examination. Libraries with historical or single-map collections may have only 500 to 1,000 maps within that space. Adjustments in weight and space should be made for the specific map case sizes and heights used in a particular library. An additional three sections should be maintained for supplies and for maps in an incomplete stage of processing.

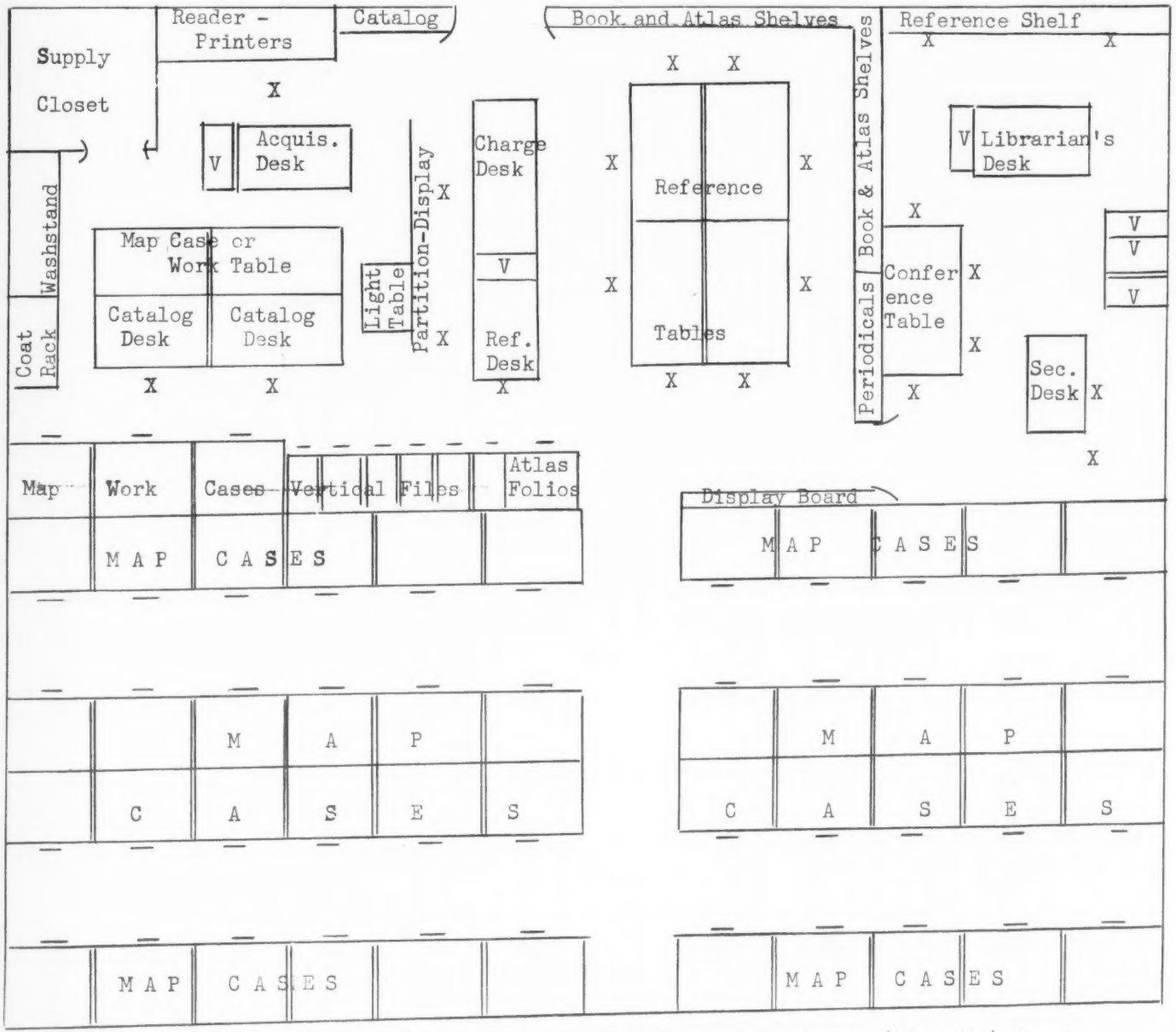
Map collections range from the small (less than 5,000 maps) through the medium (100,000 to 500,000) to the very large with a million or more maps. Space allotments will vary from a corner of a library proper to a separate building or wing. The smaller collections may include only a few cases adjacent to the bookshelves, making use of reference materials in the regular reading rooms. The medium sized collections usually have special reading rooms, which in many instances include the map cases, reference materials and other equipment as part of the area. (Refer to Fig. 2). Many of the map libraries are now crowded into limited space with narrow aisles and overloaded map cases piled four to six high, which makes for inefficient filing and retrieval of maps. The growth in the map and geography libraries has been phenomenal with collections doubling in size every 20 years. The rate of expansion should be planned in accordance with the probable growth of the parent organization itself.

A map library should include, in addition to map filing equipment, roller shelves for large atlases, shelves for reference books, a magazine rack,

Fig. 1

This represents filled cases about 4 x 3' in size with 2" deep drawers. For larger or smaller flat file cases, refer to various catalogs for weights and heights as well as sizes and project. For average of 100 maps/drawer divide weight by 2. The resultant weight per square foot should be checked with the building inspector prior to height determination.

No. of Maps	No. of 2" Drawers	Weight in lbs. per 5-drawer section-case	Wt. of Maps-lbs.	Top and Base wt.	Total wt.	Area in sq. ft.	Height	Weight/ square ft.
200	1		68	83				
1,000	5(1-sect.)	245	340	83	668	12	2'	551 lbs.
2,000	10(2-sect.)	490	680	83	1,253	12	3 1/3'	107 lbs.
3,000	15(3-sect.)	735	1,020	83	1,838	12	4 2/3'	158 lbs.
4,000	20(4-sect.)	980	1,360	83	2,483	12	6'	207 lbs.
5,000	25(5-sect.)	1,225	1,700	83	3,008	12	7 1/3'	264 lbs.
6,000	30(6-sect.)	1,470	2,040	83	3,593	12	8 2/3'	310 lbs.



MAP ROOM

X - Chair
V - Vertical Files

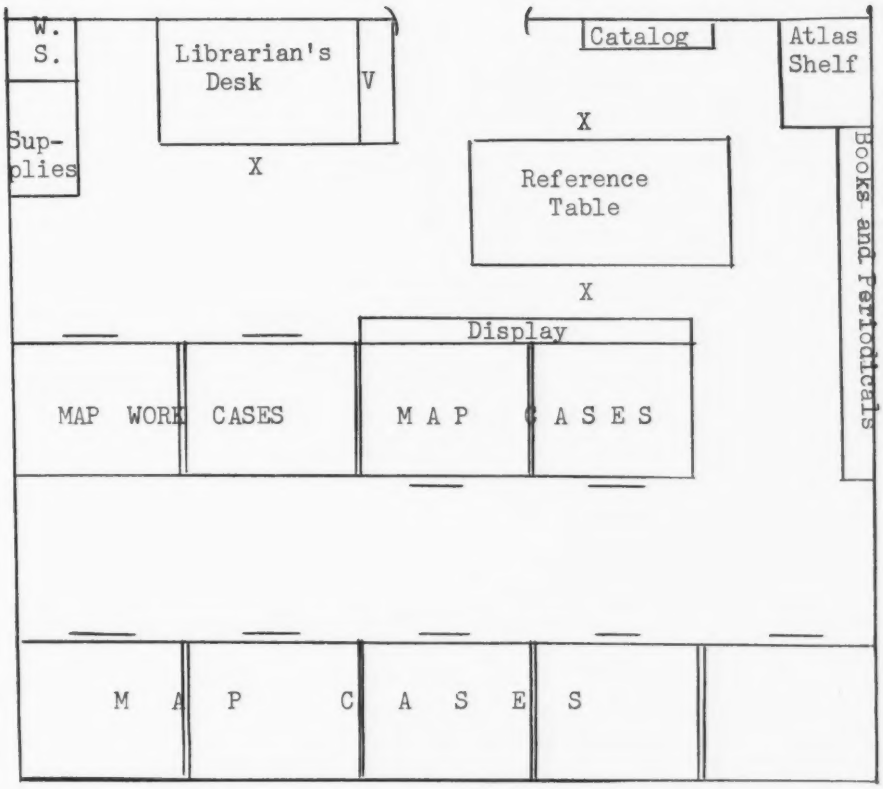
Map Cases - approx. 4 x 3' - 5-drawer sections, 3 sections high. Drawers - 2" deep. 150 maps/ drawer.

Scale: 1" = 6'

Fig. 2

864 square feet of furniture and equipment in a 2,016 square foot room (48 x 42') for a collection of 100,000 maps. Work area expandable into storage area by narrowing aisles between map cases. Storage area map cases expandable upward.

Fig. 3



An adequate installation for a collection of 10,000 maps with furniture and equipment sized as in Fig. 2. Room size is 20 x 20'. Scale - 1" equals 6'. Space expansion is possible by narrowing map case aisles and by extending map file cases upward.

WORK FLOW CHART

Administrative

Policy, Correspondence, Personnel

Acquisitions

Order New materials - received

Maps
Books
Atlases
Globes
Aerial photos
Pamphlets
Documents
Periodicals
Other

Accessions Lists
Bibliographies
Reference Letters
Requests

Unpacked
Accessioned
Processed- Processing
Classified
Cataloged - Cards prepared
Indexed
Preserved-laminated, jacketed
Labeled
Stamped

Reference - Reading Room

Card Catalog
Atlas Shelves
Periodical Shelves
Book Shelves
Pamphlet Files
Vertical Files
Map Files

Circulation

Filed

There is a direct flow of materials from acquisitions to processing to files for reference use to circulation.

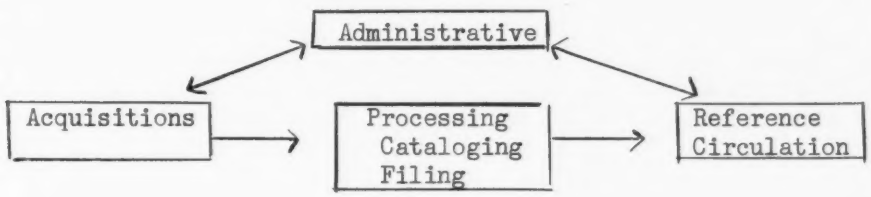


Fig. 4

vertical files for pamphlets, documents, indexes and clippings, and card catalogs or other information retrieval devices. Globes and relief models effectively displayed are decorative items as well as reference tools. Exhibition cases, display boards, or swinging panels may be used likewise for maps or books. A glass-topped, illuminated tracing table and a drafting table may be useful for libraries supporting map making or cartographic course activities. Duplicating and microreading equipment may be advantageous if the map library is large. Readers should be free to use the facilities of the map library but in general, access to the map files should be limited to authorized staff members. The location of reference materials and service points should be well marked with legible signs, as should the specific map case areas.

Modular planning is possible for established medium or large libraries only if the size of the collections is known. Their measurement by the cu-book formula may be supplemented by the area required for storage of a set number of maps as shown in Figure 2. Arrangements should be made for the purchase of coordinated equipment and furniture from companies such as Art Metal, Inc., Sjöstrom, Cole Steel Equipment and the Library Bureau of Remington Rand. (See pgs. 9-10.)

Because actual use of maps may be a noisy procedure, sound absorbing floors and ceilings are advisable in the reading room and the work areas. This should be taken care of through the services of the library architect. A rubber or vinyl tile floor covering has proved suitable for the Library of Congress, as has a cork type material used on the ceilings.

Air conditioning is strongly recommended for the preservation of maps, atlases, books, printed materials and globes as well as for the comfort of staff and readers. Experts recommend that books be kept in a place where the temperature is between 65° and 75° F. with the humidity between 30 and 50 percent. Filtered air will also save much cleaning of materials as a large part of the dirt is removed from the air before it is circulated in the area.

While outside lighting makes for a pleasant atmosphere in a reading room, care must be taken to avoid the glare of direct sunlight. Because of the small print used on many maps and the lack of clarity of many of the older maps, supplementary artificial lighting is needed to eliminate glare and shadows. Indirect, incandescent lighting producing uniform illumination of 30 to 50 foot-candles (depending on reflection, balance and color) is recommended. Professional advice would be required for each situation to insure the correct amount of light.

If the work flow diagram (Fig. 4) on the following page is applied to the two map room diagrams (Figs. 2 and 3), the work may be identified within the specific areas.

The librarian should have an office, or an area affording some degree of privacy, since administrative duties require conferences, interviews and telephone conversations. There must be a general service desk from which reader activities can be supervised.

Each staff member must have a desk in his own working area. Although some libraries allot only 40 square feet per person for book cataloging, a more

realistic floor space allotment for the map library is from 65 to 100 square feet. This may include a desk and a table, possibly to be shared. A separate work room or screened area which includes a place to process the map materials is desirable. Supply cabinets, coat racks, a sink and a drinking fountain are also needed.

Card catalogs, graphic indexes and general and special reference work should be located between the reading room and the work area for accessibility by the staff as well as the readers. Use of equipment or furniture as partitions simplifies placing of the various operations in proper relation to one another. The service area where circulation and reference activities are conducted should be near the library entrance and adjacent to the reading tables.

Some of the map libraries use special equipment for viewing microprints, microfilm and microcards. In some cases, the parent library may make such equipment available for use by the map library.

Information and retrieval systems based on automation have not been widely adopted in the map field. A clear concept of requirements before consultation with manufacturers regarding equipment of this kind is essential. The Special Libraries Association publication Technical Libraries - Their Organization and Management (revision now in process) 1951 includes information on this subject (pp. 31-35).

Security classified maps and documents must be stored in safes or vaults in accordance with regulations. Safes must have adequate locks, fireproofing and weight. A vaulted area simplifies the work of storing these materials. Cole Steel Equipment Co., Mosler and Shaw-Walker are specialists for files of this type (p. 10).

The size and bulky nature of maps and atlases make it especially desirable in the map library to have the storage area adjacent to both the reading room and the processing unit for economical movement of materials.

Standardized equipment and supplies should be used for uniformity and intra-library cooperation and exchange. Catalog cards and card cases, as well as book shelving, are examples. Thomas' Register of Manufacturers is useful for a listing of dealers, as are local telephone directories.

Sections for shelving may be of standard type--either wood or metal. The shelves should be adjustable to permit non-standard spacing for special reference materials. Shelf width should be 9 to 12 inches. On the average, 7 ordinary books or 5 bound periodical volumes occupy one foot of shelf space. This "cu-book" formula (a standard unit representing the averaged sized volume) indicates that one hundred "cu-books" will go into a section measuring 36" x 7'6" x 9".

Special wide shelving or built-in wooden cabinets may be used for oversize atlases and folios. Roller shelves, such as those used in the Library of Congress' Map Reading Room, provide excellent protection for frequently-used large atlases, reference catalogs and indexes.

The selection of suitable filing equipment is very important. A

librarian needs to consider the amount and nature of the material to be filed, the wall and floor space available, the accessibility of items in the files, the objectives of the collection, servicing the collection, future expansion, relative costs and availability of equipment.

Mrs. Clara E. Le Gear, Head of the Reference and Bibliography Section of the Map Division in the Library of Congress states in Maps, Their Care, Repair and Preservation in Libraries that:

> "Maps have certain characterisitcs that make special storage equipment imperative. It is when their requirements are ignored that maps are found to be troublesome 'stepchildren.' Properly housed and thoughtfully handled, maps become exceedingly useful tools...
>
> "Map files may be wood or steel, horizontal or vertical, built-in or sectional. The choice of wooden or steel cases will probably be governed by library policy. Horizontal files are more generally used than vertical files. Map cases in the middle of a room should not exceed center height. Cases over six feet high are somewhat less accessible than those below eye level. Where storage space is at a premium, sectional horizontal files may be stacked to a height of six feet or more... of the U.S. Army Map Service, the National Archives, the Bureau of the Census, and the Library of Congress.
>
> "If a map collection is housed in the reading room of a library, counter high horizontal or vertical files may hold the entire collection. As the collection grows, it may be expedient to keep only the most active material readily accessible. The less frequently used items may be stored in the more distant stacks...
>
> "Special equipment for the storage of maps should be selected with the utmost care. The comparable features of each type should be considered with reference to durability, capacity, accessibility, and costs.
>
> "Horizontal filing cases, both wood and steel, were in use long before vertical map files were introduced. It is generally agreed that shallow drawers have stood the test of adequate storage protection. Material is easily accessible and can be removed and refiled with a minimum expenditure of effort. For greatest efficiency, the inside drawer measurements should not exceed 2-1/2 inches in height, 44 inches in width and 30 inches in depth. If the drawers are higher, the weight of the maps becomes so great as to impede the removal of the bottom maps, even to the extent of damaging them. If they are wider and deeper, the maps may be too large for one person to handle without damaging them. Maps of varying sizes may be inter-filed without harm beyond the ever-present danger of careless handling.
>
> "Horizontal storage may be provided in two types of cases,

that is, 5-drawer sectional map cases and cabinets with thin strong shelves and roll fronts or doors...

"Each manufacturer has some individual variations in his equipment. Some feature a dust cover fastened at the back to keep the maps from riding out and hooked at the front to insure protection. Others feature metal hoods at the back of the drawers to keep the maps in and hinged metal flaps or compressors at the front to keep them from curling. Other special features include drawer dividers, safety stops, friction control to prevent slamming, etc. Of primary importance, of course, is the durability and substantial construction of the map cases in relation to drawer sizes."

Horizontal files are more generally used than vertical files for maps and blueprints larger than 14 x 17 inches. Economy and flexibility in filing maps and charts may be increased in large collections by the use of three or four sizes of file drawers. The units should be sectional so that they may be increased (generally upward) where expansion is necessary. These files are available in sizes varying from an overall width of 25 to 75 inches and a depth of 19 to 47 inches, with drawer depth of 1 to 4 inches. It should be possible to select the cases that will best fit in the assigned space as well as cases best suited to contain the collection from such manufacturers as All Steel Equipment, Mayline, Art Steel Co., Inc., Cole Steel Equipment Co., Hamilton Manufacturing Co. The Estey Corporation and the General Fireproofing Co. manufacture map storage equipment on a custom basis only for libraries who desire specially designed files.

Mrs. Le Gear also states that:

"Vertical files are a comparatively recent development, and seem to have been used first at the University of Illinois Library. P.L. Windsor described 'A New Vertical File for Maps', in the Library Journal, vol. 35, 1910, p. 509, which was constructed according to an original design and was then believed to be a new application of vertical filing. Art Metal Incorporated manufactures vertical 'planfiles' in five sizes for maps up to 37 x 50 inches and 28 to 58 inches. A planfile 30 inches deep has 15 pockets with four red rope folders in each pocket, and is said to have a capacity of 3,000 maps in active use, and between 5,000 and 6,000 in storage.

"Vertical file cases meet the requirements of quick accessibility, of maximum storage space, and minimum aisle space. When the floor space is used up, they cannot be stacked one on the other. It is claimed by the manufacturer that one 30-inch deep vertical file holds as many maps as 30 horizontal drawers, that is, six 5-drawer units. Vertical files work well when they are moderately full, and when the maps are of fairly uniform size...

"Vertical files, preferably legal size, in either wood or

steel, make suitable filing equipment for small maps and aerial photographs as well as for larger maps folded to pocket or letter size.

"The Globe Wernicke Company of Cincinnati, Ohio manufactures 'Cello-Clip' map and plan files. These are cabinets in which sheets are suspended from rods by means of 'Cello-clips' two of which are fastened to the top of each sheet. The drafting rooms of a number of engineering firms are equipped with them. Such a filing system may be practicable for the storage of vinyl plastic relief models which are quite light in weight.

"Several American libraries store their maps in dustproof buckram-covered boxes resembling large pamphlet boxes. They are made of plywood or heavy cardboard and are so constructed that the front of the box is double; the inner part of the front drops and the outer hinged part rests upon the top of the box when open. This provides easy access to the maps and facilitates filing... They can be made in a library bindery or commercially by a box manufacturer.

"Portfolios made of two hinged pieces of binder's board may serve to store a small collection of maps. For protection from dust, paper or buckram flaps should be pasted or glued along three open sides of the bottom board. Tapes fastened at the middle of each side will keep the material from sliding out when a portfolio is moved. The width and depth of available folio shelves may have to govern the sizes of the portfolios. Extraordinary care is necessary to keep maps well within the covers of portfolios to prevent broken edges and bent corners."

Rolled maps may be stored in cabinets, laid on shelves, placed in pigeonhole racks, as the Plan Hold roll files, or held upright by a sloping back spaced with dowels. Scrolls should be protected by a cloth guard and placed in a cylinder or stored in deep drawers. Dust covers of cloth or a transparent polyethelene or vinyl material should be placed over globes to protect them from dust.

Relief models that will fit in the standard map file drawers can be protected in that manner. Clothesline and clips may be attached to one edge of vinylite plastic models and hung from rods. Some libraries are experimenting with hanging racks with horizontal bars and clips on a cardboard device with special attachments for such materials.

Addresses for suppliers of standard and special types of files and shelving are:

All-Steel Equipment, Inc.
245 John Street
Aurora, Illinois

Angle Steel, Inc.
Plainwell, Michigan

Art Metal Incorporated
Jamestown, New York

Art Steel Company, Inc.
170 West 233rd Street
New York 63, New York

C. S. Brown & Co.
7535 Hillcrest Drive
Wauwatosa 13, Wisconsin

Charles Bruning Co., Inc.
1800 Central Road
Mount Prospect, Illinois

Cole Steel Equipment Co.
415 Madison Avenue
New York 17, New York

Estey Corporation
One Catherine Street
Red Bank, New Jersey

The General Fireproofing Co.
413 Dennick Avenue
Youngstown 1, Ohio

The Globe-Wernicke Co.
5009 Carthage Avenue
Cincinnati 12, Ohio

Hamilton Manufacturing Co.
1935 Evans Street
Two Rivers, Wisconsin

Lyon Metal Products Co.
1933 Montgomery Street
Aurora, Illinois

Mayline Company, Inc.
619 North Commerce St.
Sheboygan, Wisconsin

The Mosler Safe Company
320 Fifth Avenue
New York, New York

Plan Hold Corporation
5206 Chakemco Street
South Gate, California

Remington Rand (Library Bureau)
315 Fourth Avenue
New York 10, New York

Shaw-Walker Co.
1950 Townsend Street
Muskegon, Michigan

John E. Sjöstrom Co., Inc.
1717 North 10th Street
Philadelphia 22, Pennsylvania

Stacor Equipment Co.
335 Emmet Street
Newark, New Jersey

Furniture in the library should be sturdy, comfortable and attractive in design. It is recommended that table space allotted to each reader measure at least 10 square feet. A variety of types of seating should be studied. Some libraries require stools and high sloping tables, or straight chairs at reader's tables. Chairs should be short-seated for comfort and to avoid the impediment of circulation to the feet. Staff desks should be the standard office or library size, 60 x 36 inches, with supplementary working tables the same size. Typewriter desks are advisable for catalogers, acquisitions personnel, reference assistants and secretaries. Adequate shelving on top of cases or in bookstands adjacent to desks should be provided for reference materials. A conference table and chairs may be useful in the administrative offices if the size of the library and type of clientele warrant it. Generally carrells are not useful, nor are lounge chairs. A stand for the unabridged dictionary with space below frequently used reference books, a rack for displaying new books and a rack for periodicals are needed. Some manufacturers of library furniture are Art Metal Incorporated, Cole Steel Equipment Co., Remington Rand (Library Bureau) and John E. Sjöstrom Co., Inc.

Wide, flat topped trucks with dividing shelves are essential in

handling maps. Generally they are made the desired width to clear doorways and hold the maps. Book trucks are unsatisfactory for map use. Wooden map file cases with the drawers removed may be fastened together and, with wheels added, serve as holders for roughly sorted maps prior to filing.

The service area where circulation and reference activities are to be conducted should be near the library entrance and adjacent to reading tables. Map file cases, two sections high, or an arrangement of open roller-type shelving for atlases which are counter height, may be used for the circulation desk. Standard reference materials such as general atlases, gazetteers, and regularly used index catalogs should be within this area.

Bulletin boards, display cases, shelf display frames and window display facilities may be used to publicize the library collections and services. John E. Sjöstrom Co., Inc. sells table and wall display units for exhibits.

Card catalogs, special bibliographies or cartobibliographies and graphic index catalogs should be within the service area. The card catalog itself could be the regulation drawer sets as recommended by regular library supply centers such as the Remington Rand Library Bureau.

Folders to preserve the maps in horizontal files can be made from rope manila paper, press board, jute tag or red rope paper. Some agencies use the kraft paper that is in the new map case drawers, but the acid reaction of the paper discolors the maps. Folder paper should have a pH factor exceeding 4.5. Rope manila paper weighing 160 pounds per 100 sheets or a heavier 175-200 pound jute tag comes in rolls 48" wide and may be purchased from:

The Riegel Paper Corporation
260 Madison Avenue
New York 16, New York

Hollingsworth & Vose Co.
112 Washington Street
East Walpole, Massachusetts

St. Regis Paper Co.
150 East 42nd Street
New York 17, New York

Supplies of manila envelopes are needed for map addenda such as gazetteers, brochures or texts accompanying certain maps. Manila folders, notebooks or binders, mailing tubes, a trimming board, boxes, cord, wrapping paper, labels, mending and acetate tapes may be obtained from the following library or stationery suppliers:

Demco Library Supplies
Box 1488
Madison 1, Wisconsin

Gaylord Brothers, Inc.
P. O. Drawer 61
Syracuse 1, New York

Minnesota Mining & Manufacturing Co.
900 Bush Avenue
St. Paul 6, Minnesota

Other useful supplies which may be obtained locally include bowls for paste and water, brushes, sponges, lintless cloth for map backing, bone folders, squegees, scissors, magnifying glasses, sharp knives, razor blades and holders, paper weights, staplers, wax paper, rubber stamps, stamping machines,

waste baskets and trash bins.

Special map equipment such as steel straight edges, T-squares, lettering guides and pens, electric erasers, dividers, scale indicators and map tacks may be purchased from drafting supply companies such as the Mayline Co., Inc., the Charles Bruning Co., Inc., Keuffel & Esser Co., 303 Adams St., Hoboken, N.J., and Moore Push Pin Co., 113-125 Berkley Street (Wayne Junction), Philadelphia, Pennsylvania.

Laminate materials and equipment for the preservation of maps may be obtained from Gaylord, Demco, General Binding, Ditto, Inc., 6800 N. McCormick Road, Chicago 45, Illinois and American Photocopy Equipment Co., 2100 Dempster Street, Evanston, Illinois.

Typewriters should be the regular library typewriters, and if needed, non-Roman characters and diacritical marks. Large capital letters are useful for signs or labels.

Specially designed cabinets are required for microfilm, regular film and lantern slides or transparencies. Provision should be made for humidity control. The Recordak Corporation, 415 Madison Avenue, New York 17, N.Y. makes such a cabinet. The Technicon Company, Saw Mill River Road, Chauncey, New York, designs special equipment for slides.

A variety of record keeping equipment for periodicals and serials is manufactured by the Art Metal, Demco and Remington Rand Library Bureau as well as Acme Visible Records, Inc., 8900 West Allview Drive, Crozet, Virginia and Wheeldex & Simpla Products, Inc., 425 Park Avenue, South, New York 16, New York.

Few libraries have microfilm cameras in their organizations but many do keep microfilm or microcopy records. Microfilm reading machines have become standard equipment in many libraries. Listed below are some machines that are now in use, with names of their manufacturers.

Dea-Graph Readers - distributed by Dea-Graph Equipment Ltd., 1577 West Georgia Street, Vancouver 5, B.C., Canada; manufactured by the Tokyo Microphoto Works Limited, 38 Chiyodocho Nakanoku, Tokyo, Japan. Charles Bruning Co., Inc. is U.S. agent.

Documat Microfilm Reader-Printer - Documat, Inc., 75 East 55th Street, New York 22, New York.

Draftsman - Distributed by Microdealers, Inc., 1560 Trapelo Rd., Waltham 54, Massachusetts; manufactured by Schwayders Bros., Denver, Colo.

Filmac - Reader - Printer - Minnesota Mining & Manufacturing Co., 900 Bush Avenue, St. Paul 6, Minnesota.

Flofilm Readers - Photostat Corporation, P.O. Box 1970-T, Rochester 3, New York.

Microfilm Filmstrip Slide Viewer and Micro Scanner - Taylor Merchant Corporation, 48 West 48th Street, New York 36, N.Y. Also have Task Master - 10X, a pocket size reader-scanner.

Micro-Master Lens Viewer Scanner - Keuffel & Esser Co., 303 Adams Street, Hoboken, New Jersey.

Recordak Readers and Projectors - Recordak Corporation, 415 Madison Avenue, New York 17, N.Y.

Thermo-Fax Reader Printers - Minnesota Mining and Manufacturing Company, 900 Bush Avenue, St. Paul 6, Minnesota.

Webco - Western Blue Print Company, 909 Grand Street, Kansas City, Missouri.

The above is by no means a complete listing of dealers or manufacturers. Only one foreign manufacturer was mentioned, but there are many in both European and Asiatic countries.

Duplicating equipment for card-size items to document-size materials generally starts with manual typing on a standard typewriter, electromatic machine, vari-typer, etc. Care must be exercised in the selection of the typewriter and kind of type used, to provide foreign language markings for the kind of copy to be made. Master copies may be used in the following types of reproduction.

1. Stenciling and hectographing.

   Copy-rite - Wolbert Duplicator & Supply Co., 1201 Cortland Street, Chicago 14, Illinois.

   Ditto - Ditto, Inc., 6800 N. McCormick Road, Chicago 45, Illinois.

   Mimeograph - A.B. Dick Company, Dept. TR-50, 5700 West Touhy Avenue, Chicago 31, Illinois.

   Rex-o-graph - Rex-o-graph, Inc., 7840 West Hicks Street, Milwaukee 14, Wisconsin.

   Rocket - Standard Duplicating Machines Corp., 1935 Parkway, Everett 49, Massachusetts.

2. Photocopy and contact prints, Offset Duplicators.

   Apeco - Unimatic - Auto-Stat - American Photocopy Equipment Company, 2100 Dempster Street, Evanston, Illinois.

   Card to Card Printer and Developer - Tecnifax Corporation, 200 Appleton Street, Holyoke, Mass.

Copyflex - Charles Bruning Co., Inc., 1800 Central Road, Mount Prospect, Illinois.

Dea-Graph Printers - Dea-Graph Equipment Ltd., 1577 West Georgia St., Vancouver 5, B.C., Canada. Charles Bruning Co., Inc.

Dietzgen - Eugene Dietzgen Co., 2424 N. Sheffield Ave., Chicago 24, Illinois.

Documat Microfilm Printers, Documat, Inc., 75 East 55th Street, New York 22, New York.

Kecofax Projector-Printer - Keuffel & Esser Co., 303 Adams Street, Hoboken, New Jersey.

Ozamatic - Ozalid, Division of General Aniline & Film Corp., Ozalid Road, Johnson City, New York.

Peerless Rotary Printer and Dri-Stat - Peerless Photo Products, Inc., Shoreham, L.I., New York.

Photostat Viewprint Processor - Photostat Corporation, 1001 Jefferson Road, P.O. Box 1970-T, Rochester 3, New York.

Thermo-Fax - Minnesota Mining and Manufacturing Microfilm Products Division, 900 Bush Avenue, St. Paul 6, Minn.

Xerox Copyflo - Xerox Corporation, Rochester 3, New York.

3. Special copyright camera - copying bound volumes.

Apeco - Panel-Lite - American Photocopy Equipment Company, 2100 Dempster St., Evanston, Illinois.

Contoura - F.G. Ludwig Associates, 302 Coulter Avenue, Old Saybrook, Connecticut.

Cormac Book Printer - Cormac Photocopy Corp., 80 Fifth Avenue, New York 11, New York.

Coding systems for bibliographic references may be recorded on key punch cards by hand or machine and the information retrieved by a sorting needle. Equipment for these systems is produced by:

E-Z Sort - E-Z Sort Systems, Ltd., 45 Second Street, San Francisco, California.

Keysort - Royal McBee Corporation, 700 Westchester Avenue, Port Chester, N.Y.

Needlesort - Arizona Tool & Die Co., 31 E. Rillito Street, Tucson, Arizona.

Unisort - Burroughs Corp., Todd Company Division, University and Thomas Streets, Rochester 3, New York.

Systems for data processing, mechanical coding and sorting of cards, electronic brains, photographic film devices, and minicard systems have been developed by various companies. There is considerable experimentation in this line and the librarian should follow the current research and development for trends prior to a final selection for use in the library. These are some of the companies:

Bendix Aviation Company, Fisher Building, Detroit, Michigan - Computer, punched card and tabulator couplers, magnetic tape unit, multi-code paper tape readers.

International Business Machines Corporation, 590 Madison Avenue, New York 22, New York. IBM card punch sorter, collator, printer.

Remington Rand, Inc., 4th Avenue & 23rd Street, New York 10, N.Y. Tabulating cards, automatic punch, electronic sorter, alphabetical tabulator, collating reproducer, collator, computer, tape to card converter.

The space in which the library operates should be efficiently planned with the arrangement in line with the overall functions of the organization. The increase in the use of the library together with the amount of material in its collection should determine the expansion space for the housing of both standard library items and "fugitive" materials such as maps, pictures, aerial photographs, films, etc. Standard library furniture is advised and special types of equipment should be mechanized as needed for the use of both staff and the users of the library. Scientific research and developments in documentation have been accelerating at a fantastic pace. The Office of Science Information Service of the National Science Foundation publishes reports on such activities and describes specific projects in the United States and foreign countries. The projects are grouped under the categories of information requirements and uses, information storage and retrieval, mechanical translation, equipment and potentially related research. In general these and other special materials programs reflect a growing concern with the need to develop accurate information systems and the requisite devices for reading, storing, searching, and retrieval of information.

Catherine I. Bahn
Chairman

Citations

ACRL Committee. Standards for Junior College Libraries. College and Research Libraries, May 1960, vol. 21, no. 3, p. 200-206.

Brown, Lloyd Arnold. Notes on the Care and Cataloging of Old Maps. Windham, Conn. Hawthorne House, 1940.

Bureau of Government, University of Wisconsin Extension. Contemporary Library Planning, Fourth Institute, 1952 and The Public Library Building, Fifth

Institute - 1953. (typed)

Carnovsky, L. Standards for Special Libraries; Possibilities and Limitations. Library Quarterly, July 1959, vol. 29, p. 168-173.

Casey, Robert S. and James W. Perry, Madeline M. Berry, Allen Kent. Punched Cards - Their Applications to Science and Industry. 2d ed., New York. Reinhold Publishing Corporation, 1958.

Collison, Robert Lewis. The Treatment of Special Material in Libraries. 2d ed., London, Aslib, 1957.

ACRL Committee. Standards for College Libraries. College and Research Libraries, July 1959, vol. 20, p. 274-80.

Dean, Crowell O. (Mrs.) Planning the New Library: A.E. Staley Manufacturing Co. Special Libraries, Apr. 1959, vol. 50, no. 4, p. 166-170.

Devlin, Thomas J. and W.T. King. Technical Correspondence: Control and Retrieval Through Microfilm and Punch Card Technique. Special Libraries, Oct. 1960, vol. 51, no. 8, p. 421-432.

Faden, B.R. Information Retrieval on Automatic Data Processing Equipment. Special Libraries, Apr. 1959, vol. 50, no. 4, p. 162-165.

Fisher, Eva Lou. A Checklist for the Organization, Operation and Evaluation of a Company Library. New York, Special Libraries Association, 1961.

Goodman, Marie Cleckner. Map Collections in the United States and Canada: A Directory. New York. Special Libraries Association, Geography and Map Division, Map Resources Committee.

International Federation for Documentation (FID) Manual on Document Reproduction and Selection. TNO, The Hague, Nov. 1953 (FID Pub. No. 264, Vol. A)

Jackson, Lucille, ed. Technical Libraries: Their Organization and Management. New York, Special Libraries Association, Science-Technology Division, 1951.

Kiersky, Loretta J. Bibliography on Reproduction of Documentary Information 1955-1960. New York, Special Libraries Association, /Reprint for the 10th Annual Meeting and Convention, National Microfilm Association, Chicago, Ill. April 4,5,6, 1961/

Le Gear, Clara Egli. Maps: Their Care, Repair and Preservation in Libraries. Rev. ed., Washington, Library of Congress, Map Division, 1956.

McCrum, Blanche Prichard. An Estimate of Standards for a College Library. Rev. ed. Lexington, Va., Journalism Laboratory Press, Washington - Lee University, 1937.

The National Microfilm Association. The National Micro News. No. 45, Apr. 1960. 1960 supplement to the Guide to Microreproduction Equipment. Annapolis.

National Science Foundation, Office of Science Information Service. Current Research and Development in Scientific Documentation. No. 7 (NSF 60-65), Washington, U.S. Govt. Print. Off., 1960.

Parker, F.M. Engineering Drawing Processing System. Special Libraries. Oct. 1960, vol. 51, no. 8, p. 429-432.

Price, Milburne. Information Processing Equipment. New York, Reinhold Pub. Corp., 1955.

Roneo Limited. Planning the Library. London, 1950.

Sharp, Harold S. Planning the New Library, Special Libraries, Oct. 1960, vol. 51, no. 8, p. 444-448.

White, Herbert S. Application of Machines to Library Techniques. Special Libraries, Nov. 1960, vol. 51, no. 9, p. 492.

DIVISION MEMBERSHIP CHANGES

NEW:

RICHMOND, Dr. Phyllis A., 284 Maplewood Avenue, Rochester 13, N.Y. (Western N.Y.) Active

VOGEL, Miss Helen E., Ln., Business Reference Library, Brooklyn Public Library, 141 Livingston St., Brooklyn 1, N.Y. (New York) Active

DROP:

WELCH, Miss Ellen L., Rockefeller Office Library.

ADDRESS CHANGES:

ANDERSON, Mr. Frank J., 111 W. Wilson, Salina, Kansas.
BACKLUND, Mrs. Caroline H., 114 E. 90th St., New York 28, N. Y.
HAVILLAND, Mr. Morrison C., AULR, Maxwell AFB, Alabama (Alabama) Active

BUILDING LIBRARIES

Several pertinent articles on building new libraries appear in the architectural issue of the Library Journal, Volume 86, No. 21, December 1, 1961. Not referring specifically to map libraries, many of the ideas are adaptable and supplement the article on "Map Libraries - Space and Equipment" in this issue of the Bulletin.

WASHINGTON GROUP

The Washington, D.C. Geography and Map Group held its first meeting of the 1961-62 season on November 9 in the Whittall Pavilion of the Library of Congress. The Middle Atlantic Division of the Association of American Geographers had been invited to join the group to hear Dr. Carl Mapes, Chief Map Editor of Rand McNally and Company, Chicago, Illinois, talk on "Some Old Uses of Globes with New Space Age Applications." Thirty-seven members and guests of both groups were present.

After a very short business meeting Dr. Gerlach introduced Dr. Mapes with the recollection that he, as program chairman for the Geography and Map Division, had provided a very fine program at the San Francisco Convention. Also that through Dr. Mapes, Rand McNally is substantially subsidizing the Geography and Map Division Bulletin.

Dr. Mapes told us that when he became interested in the history of the globe and looked over the literature on its use he found that the best books were written in the 16th, 17th and 18th centuries. Some of the books in his collection he has had to acquire from rare book dealers. The text he is studying, "How to Use Globes," was written in 1659. No new globes were produced in the 19th century.

The globes Dr. Mapes had on exhibition dated from the 15th, 16th, 17th and 18th centuries. His oldest was a reduced facsimile of the first manuscript globe, a 20-inch sphere made by Martin Behaim in Nuremberg in 1492. Dr. Mapes thought Columbus might have seen this globe but did not carry one with him on his voyages of discovery. The first scientific globe was the armillary with the sphere free to rotate within the metal rings depicting the orbits of the planets. The other globes were very small ones that opened on a hinge to reveal the continents drawn on the inside of the hemispheres, the so-called black globe and a celestial globe.

Dr. Mapes said that mathematicians drew the first lines on globes and that early globes were always used in pairs. He demonstrated how to rectify the globe so that the earth would be in proper relation to oneself, how to use it as a world road map, how to plot the length of daylight and darkness, how to follow the path of a satellite in orbit--in short, how to translate information from the globe into modern human affairs. He showed how basic lessons in use of the globe have new applications in the present space age, stating that since October 1957 we have had man in space--first through instruments and now man himself.

Dr. Mapes closed his very interesting talk at 9:15 to give his audience a 15-minute question and answer period while he packed his globes into their zippered travelling cases. Dr. and Mrs. Mapes drove from Chicago as they have found that the easiest way to transport his globes is by automobile.

Katherine M. Laupp

PERSONAL NOTES

ARCH C. GERLACH gave an illustrated lecture at the University of Michigan on November 3 on "Propaganda Maps." The lecture was sponsored by the Geography Department and the University of Michigan Library.

GEORGE R. DALPHIN was an SLA consultant to the African Language and Area Center of Michigan State University on the Library Map Collection and General Library Holdings of Africana on October 18-20, 1961.

ENA YONGE of the American Geographical Society will be conducting a Gramatan tour for ten between April 15th and May 31st of Greece and Jugoslavia. Send her clients.

WALTER W. RISTOW has been appointed on a temporary basis as Assistant Chief of the General Reference and Bibliography Division of the Library of Congress, effective October 16.

CARTOPHILES

The New England Cartophiles met Wednesday, November 15, at the Bostonian Society, in the Old State House, Boston. Mr. Richard F. Lufkin, member of both groups, gave an illustrated talk on early Boston. Several early maps of the city were on display. The meeting was held in the Council Chamber of former days, which made a unique and historic setting.

Robert W. Lovett

GEOLOGIC MAPS

The California Division of Mines and Geology in its Mineral Information Service, v. 14, no. 11, has published a list showing the status of geologic maps of the 50 states. The information was compiled by Dr. Carlyle Gray for the 53rd annual meeting of the State Geologists Association.

Included in the information given are scale, sheet size, date, whether in or out of print, publisher (State or USGS), price, source and remarks. Three states have no geological map. In a number of states new mapping is in progress. A large amount of information is concisely given.

REVIEWS

Odell, Clarence B., editor. Denoyer-Geppert Visual-Relief Series. Chicago, Denoyer-Geppert Company.

--Pennsylvania 1:345,000 (S137vr) 1960.

--Chesapeake Bay Area 1:415,000 (J119vr) 1960.

The effective Denoyer-Geppert visual-relief series of state maps which began about five years ago with the California map is now supplemented by coverage for Pennsylvania and the Chesapeake Bay Area. This series attempts to provide a three-dimensional visual image and a good approximation of altitude. This is achieved by combining layered coloring with shaded relief. Altitude is shown by seven tints.

In addition to a general drainage pattern, county boundaries and railroads are also shown. Railroads and most of the minor place names are difficult to see beyond six feet. The Pennsylvania map includes only turnpikes but the newer one of the Chesapeake Bay Area shows many more of the principal highways. Cities and towns are classed by population in five divisions.

Although belonging to the same series, there are considerable differences between these two under review. The colors on the newer Chesapeake map are much richer and the relief effect carries better. One does not easily get the impression of plateau in northern Pennsylvania. The two layers of water depth shown on the Chesapeake map could well have been included on the Pennsylvania map where a large portion of Lake Erie is shown. The choice of a more bold face type for principal cities on the Chesapeake map is an exceptional improvement when the two are compared. At twenty feet seven city names can be read clearly but on the older--none.

A further addition on the Chesapeake map, which includes all of Maryland and Delaware and large portions of Virginia, West Virginia, New Jersey and Pennsylvania, are inset maps of Baltimore and vicinity, Washington and vicinity, and economic activities. These should enhance its teaching value. The newer, Chesapeake Bay Area map can be called superior to the earlier Pennsylvania map, although this does not lessen the teaching value of the latter, and teachers can look forward with enthusiasm to the appearance of any new maps in the series.

Whyte, Fredrica Harriman. Whyte's Atlas Guide. The Scarecrow Press. New York, 1962. 172 pp.

Whyte's Atlas Guide is primarily a subject index to twenty atlases commonly found in public libraries, secondary schools, colleges and universities. The atlases indexed range in date from 1951 to 1960 except for the out-of-print atlases by Clifford MacFadden (Atlas of World Affairs, 1946) and Erwin Raisz (Global Geography, 1944) which have a specialized approach to those subjects and are to be found in many libraries.

The Guide contains a brief analysis of each of the atlases indexed, and groups map references according to 100 headings covering geographical,

historical, economic and political information. Atlases with maps pertaining to major continental areas or any of the indexed subjects are referenced, with page numbers for the pertinent maps. Thus the Guide becomes a quick reference tool to atlases containing maps which show Alaska, the magnetic poles, ocean currents, products, the solar system, etc.

Arch C. Gerlach

COMPUTERS COMPILE

A 420-page mileage manual, giving airlines the shortest air-operated distances between 70,000 selected pairs of cities, has been compiled entirely by an electronic data-processing machine. It has been published by the International Air Transport Association. Although it took 3 years to organize the project and prepare the data for the computer, final production of the 420 master pages took only 30 hours. The I.A.T.A. said that if done "by hand" the task would have represented a year's employment for 5,000 men.

Thomas Skinner, the publishers, are considering whether they can employ the computer for compiling timetables. If their discussions with I.B.M. are satisfactory, the first of the company's timetables to be produced in this way will be Airtime, a monthly quick reference air guide for Europe. Others which might follow include the ABC Railway Guide and the ABC World Airways Guide. The possibility of expanding further the scope of these publications, after the demise of the Bradshaw timetables, is now being considered, also.

"INTERNATIONAL FOCUS--UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND"

The Advertising Division, Special Libraries Association, has just issued "International Focus--United Kingdom of Great Britain and Northern Ireland."

Published as a supplement to the Division's Bulletin, Focus gives major sources of information.

Included is a list of British Consular Offices in the United States with special emphasis on the services available in the New York Office. Sources for travel enquiries and enquiries about Commonwealth countries are given. Included is a Basic Bibliography of British Material Relating to Advertising, a compilation of Information Sources of the United Kingdom of Great Britain and Northern Ireland, a source for locating British pictures, and General Sources of United Kingdom Information.

Copies of this supplement may be obtained for $1.00 from Miss Catharine Lynch, American Broadcasting Co., 7 West 66th Street, New York 23, N.Y. Please make checks payable to Advertising Division, SLA.

NEW BOOKS

Compiled by Robert C. White

Addison, Herbert. Land, water and food. 2d ed., rev. and enl. London, Chapman and Hall, 1961. 284 p. illus. 21s. A description of some of the schemes to increase food supply.

Association of American Geographers. Committee on the Status and Trends of Geography in the United States, 1957-1960. Status and trends of geography in the United States, 1957-1960. /Washington/ Association of American Geographers, 1961. 66 p. $1.00. Information about enrollments, courses, and fields of study in academic institutions and geography in societies, business, and government.

Bromfield, Ellen. Le Bresil, portrait d'un grand pays. /1960/ Amsterdam, Editions Colibris /1960/ 150 p. illus. $8.30. Brazil in pictures.

Brown, Eric H. The relief and drainage of Wales; a study in geomorphological development. Cardiff, University of Wales Press, 1960. 186 p. illus., maps. 30s. A description of the evolution of the Welsh landscape.

Cole, Monica M. South Africa. London, Metheun /1961/ 696 p. illus., maps. 84s. A geography of the Union of South Africa, South West Africa, and the British Protectorates.

Defant, Albert. Physical oceanography. New York, Pergamon Press, 1961. 2 v. $35.00. A rather highly technical textbook.

Dobby, Ernest H. G. Southeast Asia. London, University of London Press /1960/ 415 p. maps. 21s. In this seventh edition the author has amended statistics and revised in the area of Malay and Indochina.

Duncan, Otis D. and others. Statistical geography; problems in analyzing areal data. Glencoe, Ill., Free Press /1961/ 191 p. $6.00. Methodology used in analysis of areal data.

Dury, G. H. The British Isles; a systematic and regional geography. London, Heinemann /1961/ 503 p. illus., maps. 30s. A college textbook.

Economic Survey Mission to Tanganyika. The economic development of Tanganyika. Baltimore, Johns Hopkins Press, 1961. 548 p. maps. $8.50. Assesses resources available for future development.

Freeman, Thomas W. Ireland; a general and regional geography. London, Metheun /1960/ 533 p. illus., maps. 45s. A new edition; published in 1950 as Ireland: its physical, historical, social and economic geography.

Gt. Britain. Directorate of Overseas Surveys. Catalog of maps published by the Directorate of Overseas (Geodetic and Topographical) Surveys. Surbiton, Surrey, 1960-. 1 v. 10s. Kept current by Map additions list/s/.

Haig-Brown, Roderick L. H. The living land; an account of the natural resources of British Columbia. Toronto, Macmillan, 1961. 269 p. illus., maps. $12.50. A non-technical account; attractively illustrated.

Hanna, Alexander J. The story of the Rhodesias and Nyasaland. New York. Humanities Press [1961] 288 p. illus., maps. $4.50. Historical background and development.

Harris, Chauncy D. An annotated world list of selected current geographical serials in English. Chicago, University of Chicago, Dept. of Geography, 1960. 14 p. Lists 78 periodicals 33 of which are "in other or multiple languages but making some supplementary use of English."

Heinecke, Rhoda L. Pennsylvania. [Prepared with the cooperation of the American Geographical Society] Garden City, N.Y., Doubleday [1961] 64 p. illus., maps. (Know your America program) $1.15.

Hoffman, George W. and Viola. Life in Europe: Switzerland. Grand Rapids, Mich., Fideler Co. [1961] 1960 p. illus. $3.68. Juvenile.

Hoy, Don R. Agricultural land use of Guadeloupe. Washington, Natl. Acad. of Sciences - National Research Council, 1961. 90 p. illus., maps. (Foreign field research program, report no. 12) $2.00. Thesis submitted by the author to the Geography Dept., Univ. of Illinois.

Hughes, Margaret E. and James, A. J. Wales; a physical, economic and social geography. London, University of London Press [1961] 240 p. illus., maps. 13s/6d.

International Economic Association. Economic development for Latin America; proceedings of a conference held by the International Economic Association. Edited by Howard S. Ellis. New York, St. Martin's Press, 1961. 478 p. $10.00. An examination of the problems involved.

Johnston, A. G. Index of publications of the Geological Survey of Canada (1845-1958) [Ottawa] Geological Survey of Canada [1961] 378 p. map. $3.00. Finding lists are included.

Jorre, Georges. The Soviet Union, the land and its people. Trans. and rev. by E. D. Laborde. [New York] Longmans [1961] 372 p. illus., maps. (Geographies for advanced study) $7.50. Considerable revision in the treatment of the Soviet economic system.

Keur, John Y. and Dorothy L. Windward children; a study in human ecology of the 3 Dutch Windward Islands in the Caribbean. New York, Humanities Press, 1960. 299 p. illus., maps. $6.50. Political, social and economic aspects are also examined in this ecological study.

McFall, Christie. Maps mean adventure. New York, Dodd, Mead [1961] 128 p. illus., maps. $3.00. Juvenile.

Miklós, Gyula, ed. Studies in Hungarian geographical sciences. Budapest, Hungarian Academy of Sciences, 1960. 84 p. illus., maps. $4.00. Presentations of Hungarian geographers at the 1960 Stockholm Congress of the International Geographical Union.

Murphy, Rhoads. An introduction to geography. Chicago, Rand McNally, 1961. 699 p. illus. $7.75. A college text.

Oxford University. Bodleian Library. The large scale county maps of the British Isles, 1596-1860, a union list. Oxford, 1960. 52 p. 7s/6d.

Richard, Charles and Place, James, eds. East African explorers. London, Oxford University Press, 1960. 356 p. (The world's classics, 572) 8s/6d. Extracts of writings of Livingstone, Stanley, Burton, and others.

Robinson, Harry. The Mediterranean lands. London, University Tutorial Press. [1960] 468 p. illus., maps. 21s. A college text.

Schurz, William L. Brazil; the infinite country. New York, Dutton [1961] 346 p. $6.00. A general survey.

Sømme, Axel, ed. A geography of Norden: Denmark, Finland, Iceland, Norway, Sweden. Oslo, Cappelens [1960] 362 p. illus., maps. 57Kr. A geographic presentation by geographers of those countries to their colleagues attending the 19th International Geographical Congress.

Sparrow, Gerald. Modern Jordan. London, Allen & Unwin [1961] 180 p. illus. 25s. A brief summary.

Tregonning, Kennedy G. North Borneo. London, H.M. Stationery Off. [c1960] 272 p. illus., map. 30s. A description of the country.

U.S. Library of Congress. Map Division. A guide to historical cartography; a selected, annotated list of references on the history of maps and map making, compiled by Walter W. Ristow and Clara E. LeGear. 2d ed., rev. Washington, 1960. $.35. "Several references, included in the earlier work, have been omitted and a number of new ones added."

U.S. Public Health Service. Division of International Health. Republic of the Congo (formerly the Belgian Congo); a study of health problems and resources. [Washington, 1960] 115 p. map ([U.S.] Public Health Service, Publication no. 806) A broad picture of the health situation.

U.S. Weather Bureau. Climatology at work; measurements, methods and machines. Washington, 1960. 109 p. illus. "This publication describes the functions, scope, and capabilities of the centralized climatological facility located at Ashville, North Carolina."

Walker, Donald S. The Mediterranean Lands. New York, Wiley [1960] 524 p. illus., maps. $6.75. College textbook.

Whitnah, Donald R. A history of the United States Weather Bureau. Urbana, University of Illinois Press, 1961. 267 p. illus. $6.00. The story from 1870 with its beginning in the U.S. Army Signal Corps.

NEW MAPS AND ATLASES

Compiled by Charles W. Buffum and others

AFRICA. Wenschow-relief map. 1:6,000,000. Drawn and printed by Karl Wenschow, G.M.B.H., Munchen, West Germany. English text edition prepared with the editorial assistance of Denoyer-Geppert Co. July 1, 1961 de facto boundaries. Chicago, Denoyer-Geppert Co., c1961. col. map 167 x 151 cm. (Map RL 4) Relief shown by hypsometric tints and shading.

AFRICA. Export production in tropical Africa by commodity or group and by percent of tital value in 1957. [ca. 1:7,500,000.] By William A. Hance, Vincent Kotschar, Richard Peterec. Place names and railways are accurate as of 1960. [New York, American Geographical Society of New York, 1961] col. map 89 x 117 cm. Issued with Geographical Review, v. 51, no. 4, Oct. 1961.

ANGOLA. Provincia de Angola: Mapa rodoviário. Escala 1:1, 500,000. Comp. e des. por S. Cabral, 1959-1960. Luanda [Provincia de Angola, Direcção dos Servicos de Obras Públicas e Transportes] 1960. col. map 109 x 96 cm. on 4 sheets.

ANTARCTICA. USAF global navigation and planning chart: Antarctica. Scale 1:5,000,000 along the 90 degree E and 90 degree W meridians; transverse Mercator projection. St. Louis, Mo., Aeronautical Chart and Information Center, United States Air Force, 1961. col. map 99 x 140 cm. (GNC 26; spec. no. GNC-a-2) Relief shown by form lines and shading. Without isogonic lines. Issued with U.S. Antarctic Projects Office. Bulletin, v. 3, no. 1, Sept. 1961.

ARIZONA. Geologic map of the Bright Angel quadrangle, Grand Canyon National Park, Arizona. Scale 1:48,000. By John H. Maxson, 1961. [n.p.] Grand Canyon Natural History Association, c1961. col. map on sheet 84 x 61 cm. "Topography by ... United States Geological Survey. Contour interval 50 feet." Includes 4 col. cross sections and index map of Arizona.

ATLANTIC OCEAN. Physiographic diagram of the South Atlantic Ocean, the Caribbean Sea, the Scotia Sea, and the eastern margin of the South Pacific Ocean. [ca. 1:10,000,000] By Bruce C. Heezen and Marie Tharp, New York, Geological Society of America, c1961; col. map 142 x 121 cm. Shows also physiographic development of land areas. Mercator projection. "The descriptive text, treating the nomenclature and the morphological, geological and geophysical characteristics of the area is planned for publication by the Society in 1962."

CALIFORNIA. California political subdivision maps (census of 1960, reapportionment of 1961) showing Assembly, Senatorial and Congressional districts. [Scales vary] Sacramento, Calif., Documents Section, Printing Division [1961] 40 maps 56 x 43 cm. The first reapportionment maps of a state necessitated by 1961 census. ($2.00 per set.)

EUROPE. La communauté Européenne: Euratom. Carte des installations nucléaires de la Communauté Européenne de l'énergie atomique. Echelle: 1:2,000,000. Dressée par la Section Cartographique du Collège d'Europe sous la direction de I.B.F. Kormoss; dessinée par l'Instutut Cartographique Bootsma, La Haye. Bruxelles, Service d'Information des Communautés Européennes de le Service du Porte-Parole de l'Euratom, 1961. col. map 104 x 94 cm.

EUROPE. Political Europe. Scale 1:4,750,000 approximately or 75 miles to the inch. Edition 1961. Edited by S. Van Valkenburg. Chicago, Denoyer-Geppert Co., c1961. col. map 133 x 107 cm. (Denoyer-Geppert Series. Map J2) "September 1, 1961, de facto boundaries are shown."

EUROPE. Wenschow relief-like Europe. Europe: Wenschow relief map. 1:3,000,000. July 1, 1961 de facto boundaries. Drawn and printed by Karl Wenschow GMBH, Munchen, West Germany. English text edition prepared with the editorial assistance of Denoyer-Geppert Company. c1961. col. map 165 x 162 cm. (Map RL2s). Relief shown by hypsometric tints and shading.

ILLINOIS. Illinois 1961 aeronautic chart. Scale 1:500,000. 7th revision, July 1, 1961. Springfield, Ill., Dept. of Aeronautics, State of Illinois, c1961; col. map on sheet 73 x 84 cm. Printed on both sides of sheet.

MONTANA. Glacial map of Montana east of the Rocky Mountains. Scale 1:500,000. By Roger B. Colton, Richard W. Lemke, and Robert M. Lindvall. Washington, U.S. Geological Survey, 1961. col. map 75 x 145 cm. (Miscellaneous geologic investigations. Map I-327) ($1.50)

NORTH AMERICA. Wenschow-relief map. 1:6,000,000. Drawn and printed by Karl Wenschow GMBH. English text edition prepared with the editorial assistance of Denoyer-Geppert Company, Chicago. Munchen, Western Germany; Denoyer-Geppert Company, Chicago, sole American agents, c1961. col. map 165 x 148 cm. (Map RL5) Relief shown by hypsometric tints and shading.

NORTH AMERICA. Portland Cement plants, U.S., Canada & Mexico. Portland cement producing and distributing plants in United States, Canada and Mexico. [ca. 1:7,500,000] Chicago, Pit & Quarry Publications, c1961. map 85 x 110 cm.

OHIO. Glacial map of Ohio. Scale 1:500,000. By Richard P. Goldthwait, George W. White, and Jane L. Forsyth. Washington, U.S. Geological Survey, 1961. col. map on sheet 94 x 100 cm. (U.S. Geological Survey. Miscellaneous geologic investigations. Map I-316) "The first such map of any State to be published by the Survey." (75 cents)

SOUTH AMERICA. Political South America. Scale approximately 1:7,200,000. Modified orthographic projection. Edited by Clarence F. Jones. Chicago, Denoyer-Geppert Co., c1961. col. map 133 x 107 cm. (Denoyer-Geppert series. Map J6)

SWAZILAND. Geological map of Swaziland. Scale 1:125,000. Compiled by D.R. Hunter from geological surveys drawn by B. Clements. [Mbabane?] Swaziland Geological Survey and Mines Dept., 1959. col. map 153 x 113 cm. on 2 sheets.

TEXAS. State of Texas. Natural gas pipe lines, showing also gas fields and oil and gas fields as of Jan. 1, 1961. Scale [ca. 1:1,350,000] Prepared to accompany report for Texas Industrial Commission by Ralph E. Davis Associates, July, 1961. Houston, Tex., c1961. col. map 93 x 100 cm.

UNION OF SOUTH AFRICA. Talbot, A.M. and W.J. Atlas of the Union of South Africa. Pretoria, Gov't. Printer, 1960. 178 pp. maps. $16.20. A national atlas in both English and Afrikaans.

UNITED STATES. The American Civil War, 1861-1865. Scale [ca. 1:1,980,000] By Robert D. Lambert. Haslett, Mich., Historical Maps, c1961. map 83 x 121 cm. Insets: The war in the West: Shiloh. Vicksburg. Chicamauga. Nashville. The war in the East: Antietam. Fredericksburg. Gettysburg. Petersburg. "These maps depict areas generally as they were a century ago. Basic map data was taken from the Atlas to accompany the Official Records of the Union and Confederate Armies, United States Government Printing Office." On heavy art paper.

UNITED STATES. Buying power maps... Urban and suburban areas. Distribution and relative buying power of households based on local average net income per household. Scale 1:48,000 or 1" to 4,000'. Pelham, N.Y., Sanborn Map Company. col. maps 55 x 42 cm. ($15.00 per sheet) A continuation of series listed in Bulletin 42,43,44,45.) Jersey City, N.J.; Minneapolis-St. Paul, Minn., (Sheets A-B); San Bernardino, Riverside, Ontario, Calif., (Sheets A-C).

UNITED STATES. Forests and trees of the United States. Scale [ca. 1:8,250,000] Washington, American Forest Products Industries, Inc., [1961] col. map 61 x 87 cm. Insets: Alaska.--Hawaii.

UNITED STATES. Gousha American highway atlas. Prepared by the H.M. Gousha Company. Chicago, I.S. Berlin Press, c1961. 103 pp. col. maps. 43 x 33 cm.

UNITED STATES. Map showing location of the Indian reservation areas and principal highways leading thereto. Scale [ca. 1:3,750,000] Compiled and drawn by Abraham P. Yonteff. Washington, U.S. Dept. of the Interior, Bureau of Indian Affairs, Branch of Industrial Development, 1961. col. map 76 x 108 cm. Inset: Cultural areas in Alaska. Text on verso.

UNITED STATES. Rand McNally road atlas, United States, Canada, Mexico; with index to counties, cities & towns. [Chicago] Rand McNally & Co., c1961. 112 pp. col. maps. 38 x 29 cm. ($1.95).

UNITED STATES. Sales Management. County retail sales... shown by color shadings, using data from Sales Management's May 10, 1961 survey of buying power. [Scales vary] New York, c1961. 8 col. maps on sheets 43 x 28 cm. With insets.

Contents:
[1] New England States. Scale [ca. 1:2,000,000]
2 Middle Atlantic States. Scale [ca. 1:2,700,000]
3 Southeastern States. Scale [ca. 1:5,600,000]
4 West South Central States. [ca. 1:4,850,000]
5 East North Central States. [ca. 1:3,800,000]
6 West North Central States. [ca. 1:4,800,000]
7 Mountain States. Scale [ca. 1:5,900,000]
8 Pacific States. Scale [ca. 1:5,100,000]

UNITED STATES. Status of topographic mapping in the United States, July 1961. Scale 1:5,000,000. Washington, U.S. Geological Survey [1961] 2 col. maps 62 x 99 cm. (Sheet of the National atlas of the United States) Insets: Location map[s]. Gratis.

UNIVERSE. Ernst, Br., and Bries, Tj. E. de. Atlas of the universe. Translated by D.R. Welsh. Edited by H.E. Butler. [London] Nelson, 1961. 226 pp. illus., maps (celestial) $9.95. For the general reader interested in astronomy and space travel.

U.S.S.R. Fullard, Harold, ed. Soviet Union in maps /its origin and development./ London, Philip, c1961. 32 pp. maps.

WORLD. The floor of the World Ocean. Scale 1:50,000,000. Breisemeister elliptical equal-area projection, modified for this centering. Drawn by Richard Edes Harrison, 1961. /Lawrence, Kan./ c1961. col. map on sheet 54 x 75 cm. (Annals of the Association of American Geographers. Annals map supplement no. 2.) Issued with the Annals of the Association of American Geographers, vol. 51, no. 3, Sept. 1961.

WORLD. National Geographic Society, Washington, D.C. Atlas folio. Washington. The following maps for this atlas (See Bulletins no. 38, Dec. 1959 and no. 42, Dec. 1960) have been issued since last report:

2. The World. 1:63,360,000. Nov. 1960.
5. The United States. 1:7,603,200. July 1961.
10. South Central United States. 1:2,851,200. Feb. 1961.
14. Battlefields of the Civil War. 1:2,851,200. April 1961.
22. Mexico and Central America. 1:4,942,080. Oct. 1961.
37. Italy. 1:2,154,240. Nov. 1961.
49. Southeast Asia. 1:8,236,800. May 1961.
51. Japan and Korea. 1:3,801,600. Dec. 1960.

WORLD. Rand McNally Worldmaster atlas. Chicago, Rand McNally & Co., c1961. 180 pp. (p. 2-143 col. maps.) 27 x 18 cm. ($1.95). "Perfect for student and family."

WORLD. The world. Scale 1:12,233,000 at the Equator. Mercator projection. Compiled from information to 1961 by the U.S. Navy Hydrographic Office. 2nd ed. Washington, U.S. Navy Hydrographic Office, 1961. col. map 251 x 371 cm. on 12 sheets 91 x 117 cm. (H.O. Misc. 15,254.) Relief shown by shading; depths by gradient tints. "Note: Polar regions (60 degrees to 90 degrees north and south lat.) covered on sheets 13 and 14, polar stereographic projection, scale 1:8,500,000 at lat. 70 degrees. (In preparation). Separate latitude and longitude border sheets (15 and 16) are available for use in framing any given area." ($1.00 per sheet.)

MOON. Topographic lunar map. Scale 1:5,000,000. Modified stereographic projection. Compiled in 1960 by stereophotogrammetric methods from photography by the Paris Observatory, dated 1896-1907. Ed. 1-AMS; preliminary printing; Sheet 1. Washington, U.S. Army Map Service, 1961. map 133 x 99 cm. (Topographic lunar maps 1:5,000,000) "Contour interval 1000 meters, with supplementary contours at 500 meter intervals." "Lunar names listing" on verso. Also available with gradient tint printing.

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